PacWave™

TECHNICAL SPECIFICATIONS

PSC-HB-I-FM Series | High Bay PIR Occupancy Sensor

Basic Features

- Digital passive infrared (PIR) sensor
- Input voltage: 120-277VAC, 50/60Hz or 347/480VAC, 50/60Hz
- IP65 rated version for wet locations
- Dual relay & dimming version
- Mounting height up to 40ft
- 4 lens options: high bay, low bay, center aisle, end of aisle
- Time-delay and sensitivity controls
- Photocell for daylight sensing
- LED indicator light
- UL listed E341446

c UL us

E341446

Suitable for indoor or outdoor use

Applications

The PSC-HB-I-FM series high bay PIR occupancy sensor is designed specifically for use in commercial and industrial applications such as warehouses, distribution centers shop areas, parking garages, and assembly areas.

High bay lens supports mounting heights up to 40ft. Low bay lens supports mounting heights up to 20ft. Both lenses provide 360° coverage. Special covers are available to adapt this detection pattern for use in aisles.

The PSC-HB-I-FM is best suited for detecting tangential motion.

Sensor Operation

The PSC-HB-I-FM detects occupant motion by comparing the infrared energy (heat) emitted by moving objects with the background space. Users can adjust sensitivity, time delay, and other settings via a dip switch (must remove the front cover to gain access).

Photocell version can prevent lighting from turning on if adequate daylight is available. It is designed to turn lights on at 30±15lux and off at >100lux.

Dual relay version can control two loads in the same fixture. This enables users to achieve bi-level dimming and can extend lamp life.

Accessories

High bay lens is factory pre-installed by default, but other options for lenses and lens covers are available.

Optional mounting arm available for non-wet location rated models. See “Packaging & Accessories” for more information.

If ordering separate from sensor:

LBL: Low bay lens
HBL: High bay lens
AL1: Center aisle lens cover
AL2: End of aisle lens cover
ARM: Mounting arm (extender module)
BC: Back Cover

How to Order

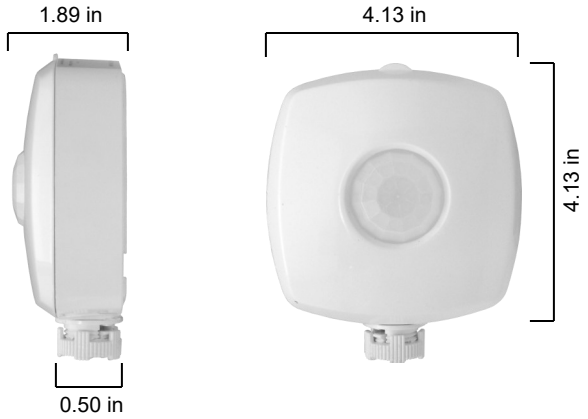
Model No.*	Description	Input Voltage	Min Load	Output / Max Load
PSC-HB-I-FM-700	PIR basic	120-277VAC, 50/60Hz	None	800VA @ 120VAC, 6.7A 1200VA @ 208/240/277VAC, 4.3A
PSC-HB-I-FM-710	PIR w/photocell			
PSC-HB-I-FM-100	PIR basic			
PSC-HB-I-FM-110	PIR w/photocell			
PSC-HB-I-FM-100D	PIR basic; dual load			
PSC-HB-I-FM-110D	PIR w/photocell; dual load			
PSC-HB-I-FM-100W	PIR basic; wet location			
PSC-HB-I-FM-110W	PIR w/photocell; wet location			
PSC-HB-I-FM-100DW	PIR basic; dual load; wet location			
PSC-HB-I-FM-110DW	PIR w/photocell; dual load; wet location			
PSC-HB-I-FM-200	PIR basic	347/480VAC, 50/60Hz	None	1500VA @ 347VAC, 4.3A 2000VA @ 480VAC, 4.1A
PSC-HB-I-FM-210	PIR w/photocell			
PSC-HB-I-FM-200W	PIR basic; wet location			
PSC-HB-I-FM-210W	PIR w/photocell; wet location			

* See “Packaging & Accessories” for more detailed information.

PSC-HB-I-FM-700

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A 1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

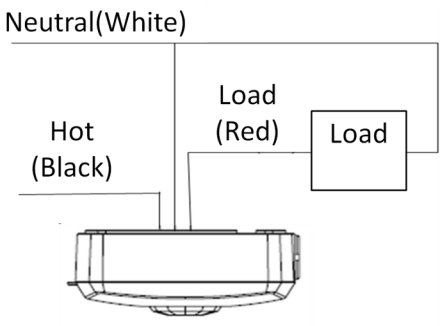
Physical Dimensions



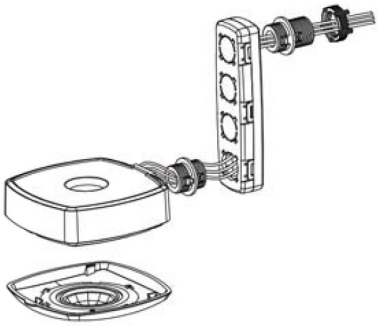
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-100W

Weight: 7.05 oz

Wiring Diagram



Assembly



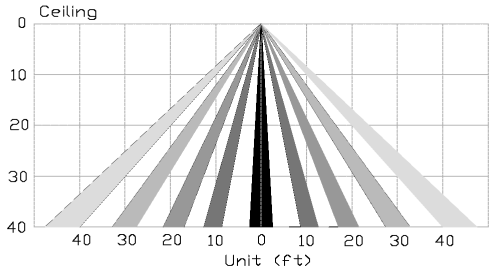
Settings Adjustment

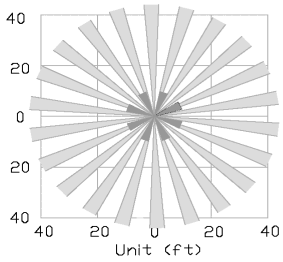
Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	
↑ ↓ 80%	↓ ↑ ↓ 30 sec	
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

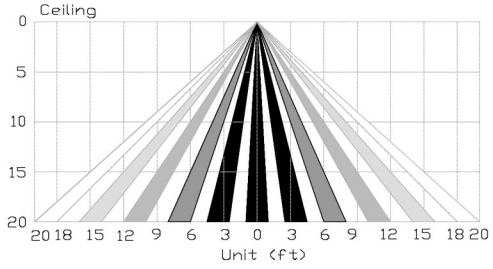
Detection Area

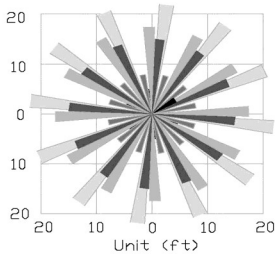
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





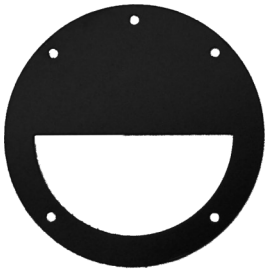
LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





AL1: Center aisle lens cover

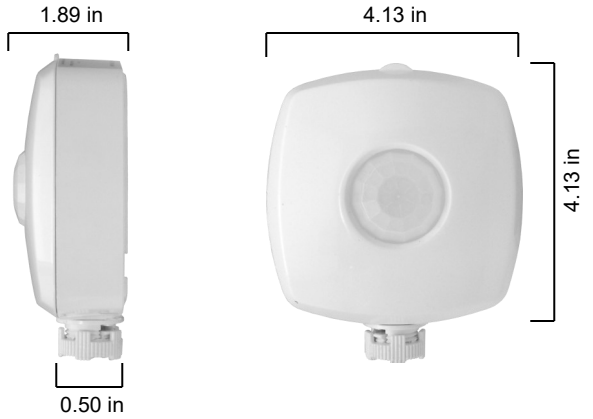
AL2: End of aisle lens cover



PSC-HB-I-FM-100

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

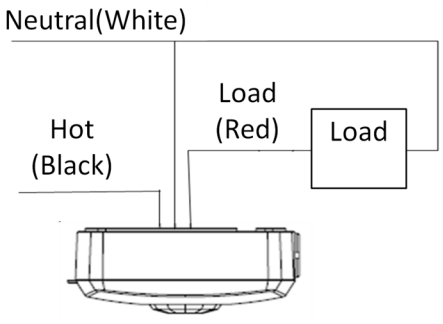
Physical Dimensions



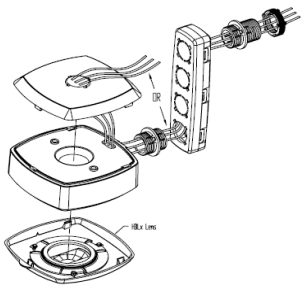
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-100W

Weight: 7.05 oz

Wiring Diagram



Assembly



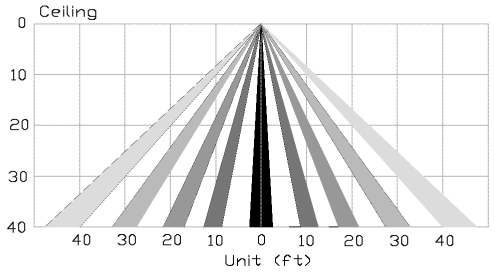
Settings Adjustment

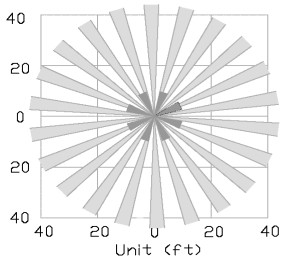
Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	
↑ ↓ 80%	↓ ↑ ↓ 30 sec	
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

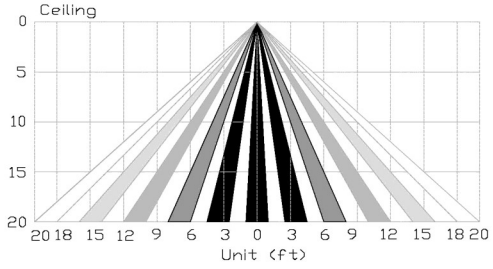
Detection Area

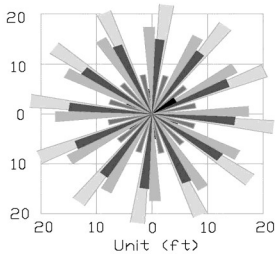
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





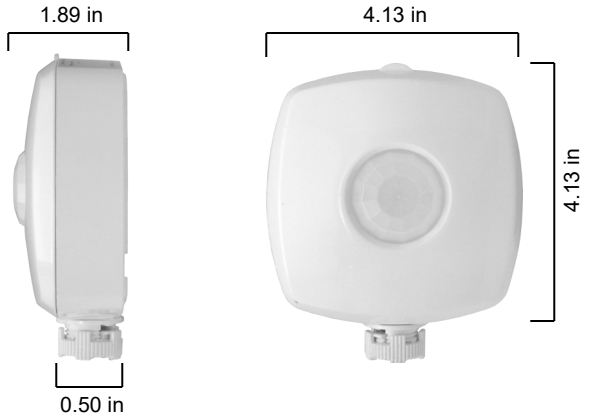
AL1: Center aisle lens cover

AL2: End of aisle lens cover

PSC-HB-I-FM-110

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A 1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

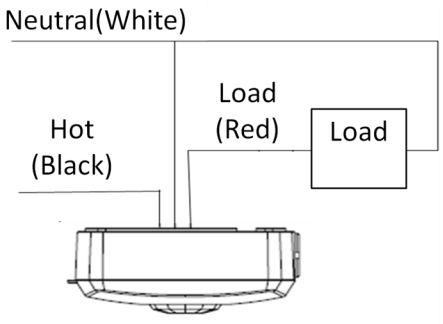
Physical Dimensions



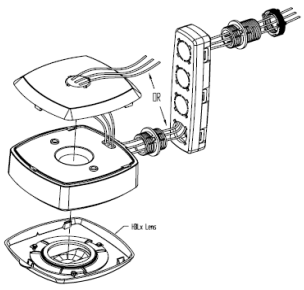
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-110W

Weight: 7.05 oz

Wiring Diagram



Assembly



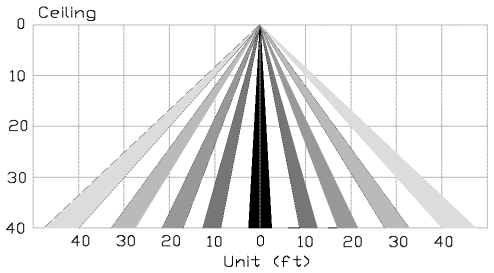
Settings Adjustment

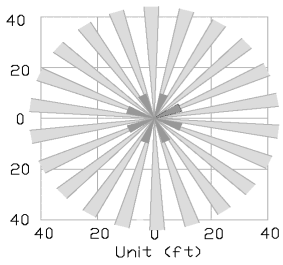
Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	↓ ↓ ↑ PIR + Photocell
↑ ↓ 80%	↓ ↑ ↓ 30 sec	↓ ↑ ↑ Photocell only
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

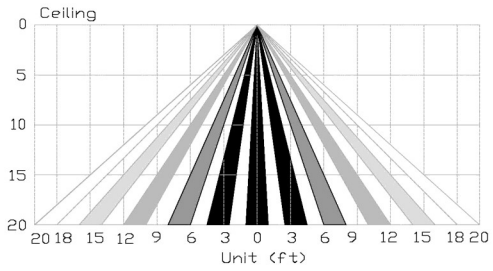
Detection Area

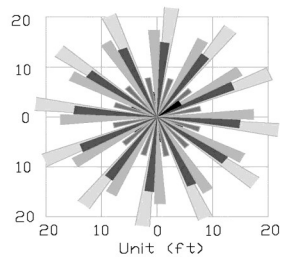
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





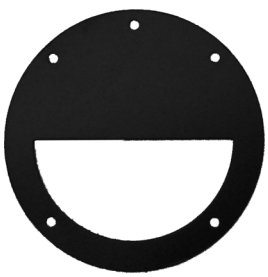
LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





AL1: Center aisle lens cover

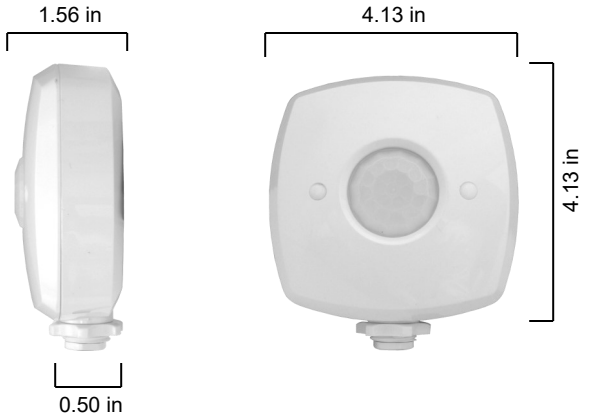
AL2: End of aisle lens cover



PSC-HB-I-FM-100W

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

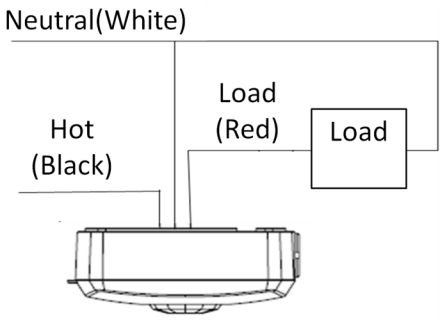
Physical Dimensions



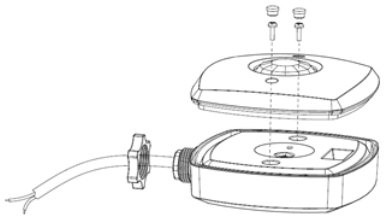
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-100

Weight: 7.8 oz

Wiring Diagram



Assembly



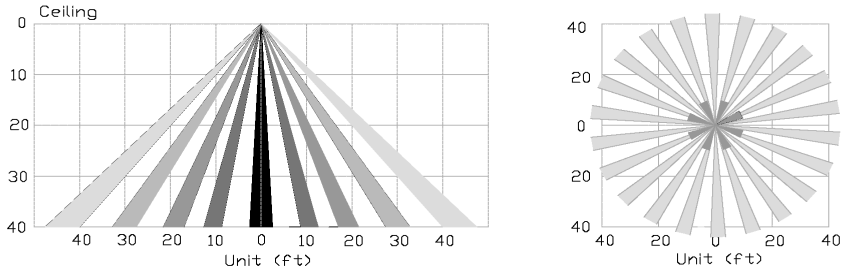
Settings Adjustment

Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	
↑ ↓ 80%	↓ ↑ ↓ 30 sec	
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

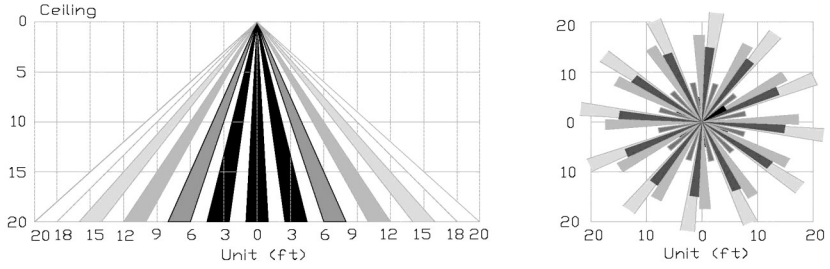
↓ : OFF
↑ : ON

Detection Area

HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

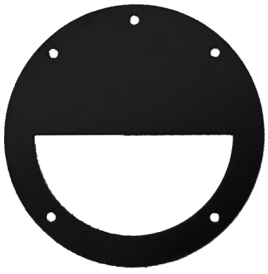


LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



AL1: Center aisle lens cover

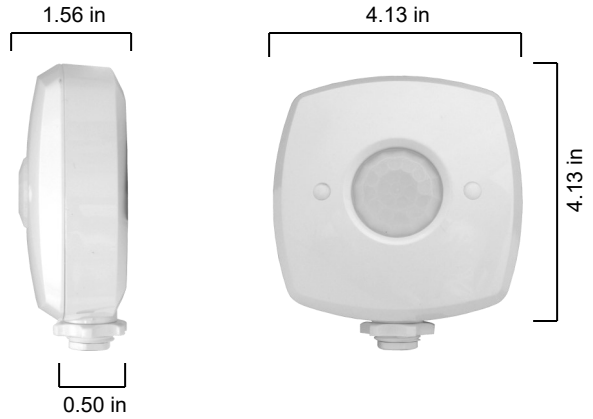
AL2: End of aisle lens cover



PSC-HB-I-FM-110W

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

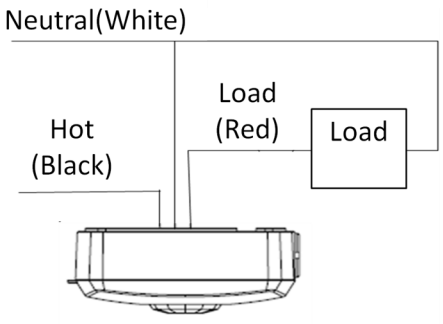
Physical Dimensions



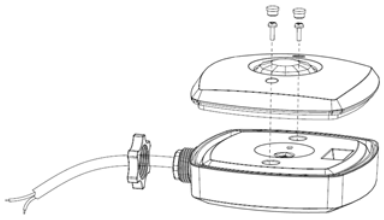
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-110

Weight: 7.8 oz

Wiring Diagram



Assembly



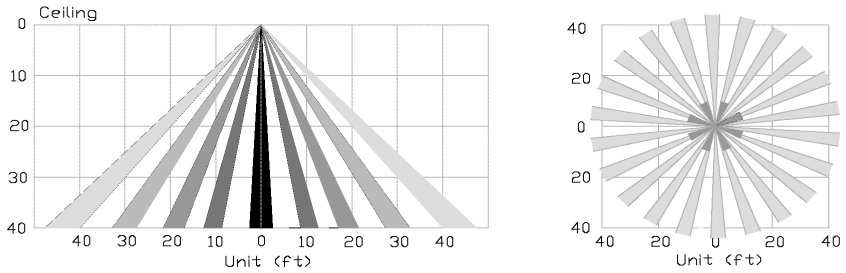
Settings Adjustment

Sensitivity			Delay Time				Sensor Logic			
1	2		3	4	5		6	7	8	
↓	↓	100%	↓	↓	↓	10 sec	↓	↓	↓	PIR sensor only
↓	↑	90%	↓	↓	↑	20 sec	↓	↓	↑	PIR + Photocell
↑	↓	80%	↓	↑	↓	30 sec	↓	↑	↑	Photocell only
↑	↑	70%	↓	↑	↑	1 min				
			↑	↓	↓	2 min				
			↑	↓	↑	5 min				
			↑	↑	↓	10 min				
			↑	↑	↑	20 min				

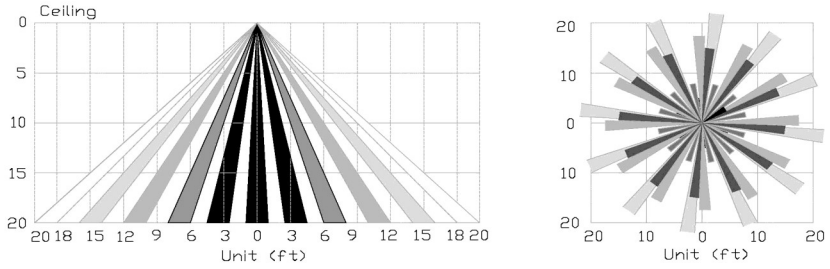
↓ : OFF
↑ : ON

Detection Area

HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft



LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



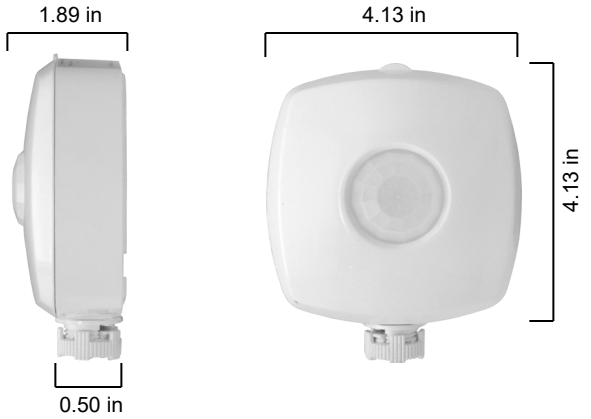
AL1: Center aisle lens cover

AL2: End of aisle lens cover

PSC-HB-I-FM-100D

Summary	
Sensor Type	Passive infrared (PIR); dual load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

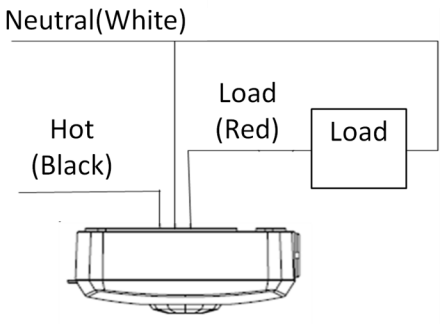
Physical Dimensions



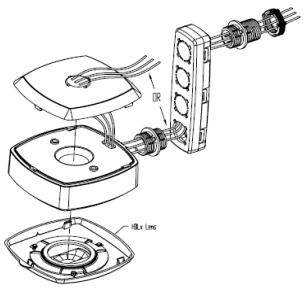
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-100DW

Weight: 7.05 oz

Wiring Diagram



Assembly



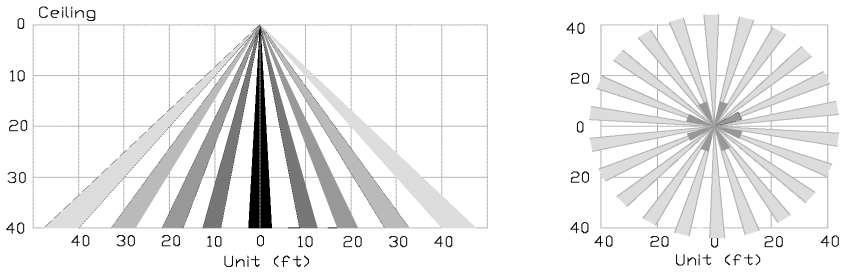
Settings Adjustment

Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	↓ ↓ ↑ Load 1 + Photocell
↑ ↓ 80%	↓ ↑ ↓ 30 sec	↓ ↑ ↓ Load 2 + Photocell
↑ ↑ 70%	↓ ↑ ↑ 1 min	↓ ↑ ↑ Photocell only
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

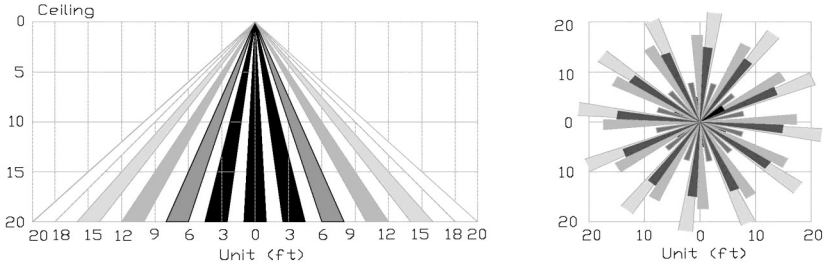
Detection Area

HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

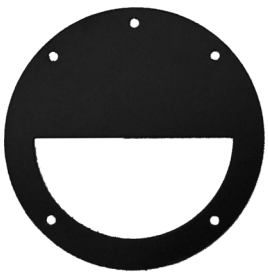


AL1: Center aisle lens cover

LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



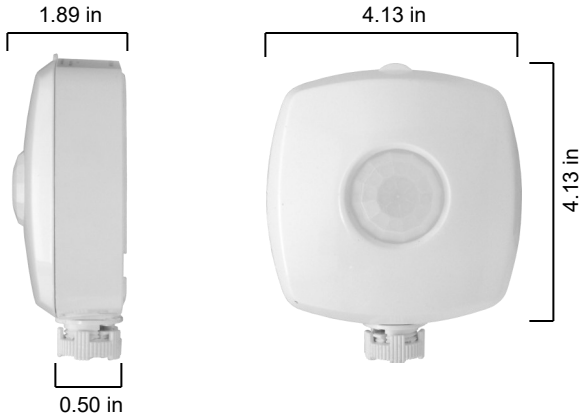
AL2: End of aisle lens cover



PSC-HB-I-FM-110D

Summary	
Sensor Type	Passive infrared (PIR); dual load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A 1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

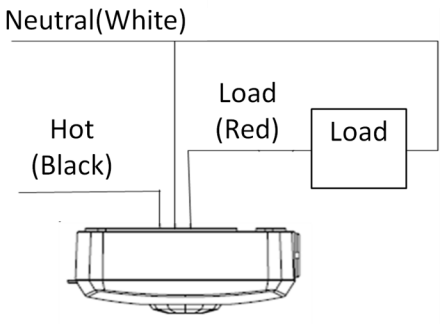
Physical Dimensions



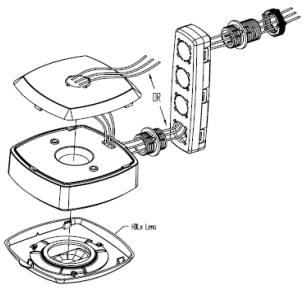
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-110DW

Weight: 7.05 oz

Wiring Diagram



Assembly



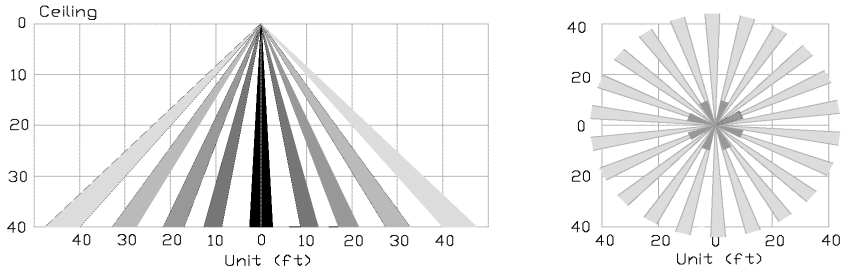
Settings Adjustment

Sensitivity			Delay Time				Sensor Logic			
1	2		3	4	5		6	7	8	
↓	↓	100%	↓	↓	↓	10 sec	↓	↓	↓	PIR sensor only
↓	↑	90%	↓	↓	↑	20 sec	↓	↓	↑	Load 1 + Photocell
↑	↓	80%	↓	↑	↓	30 sec	↓	↑	↓	Load 2 + Photocell
↑	↑	70%	↓	↑	↑	1 min	↓	↑	↑	Photocell only
			↑	↓	↓	2 min				
			↑	↓	↑	5 min				
			↑	↑	↓	10 min				
			↑	↑	↑	20 min				

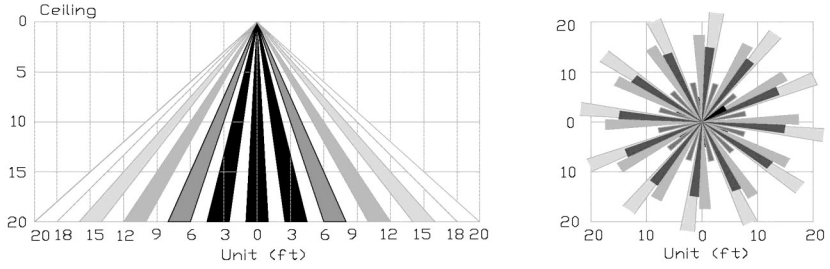
↓ : OFF
↑ : ON

Detection Area

HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

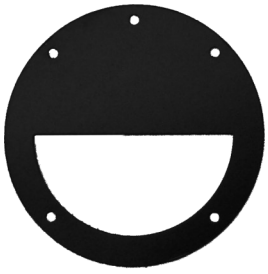


LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



AL1: Center aisle lens cover

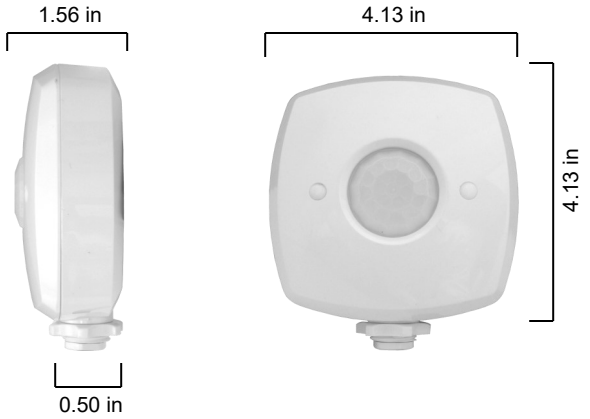
AL2: End of aisle lens cover



PSC-HB-I-FM-100DW

Summary	
Sensor Type	Passive infrared (PIR); dual load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-40° to 60°C
Storage Temperature	-40° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

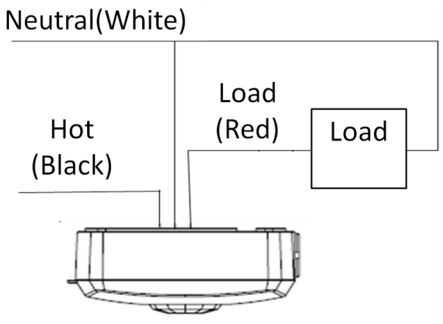
Physical Dimensions



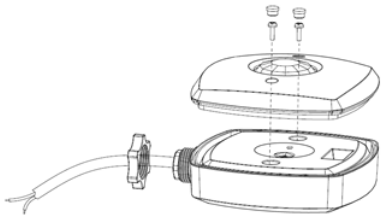
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-100D

Weight: 7.8 oz

Wiring Diagram



Assembly



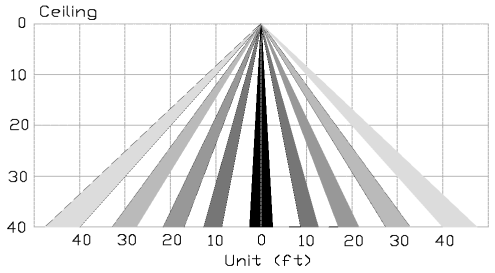
Settings Adjustment

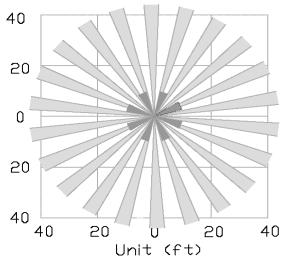
Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	↓ ↓ ↑ Load 1 + Photocell
↑ ↓ 80%	↓ ↑ ↓ 30 sec	↓ ↑ ↓ Load 2 + Photocell
↑ ↑ 70%	↓ ↑ ↑ 1 min	↓ ↑ ↑ Photocell only
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

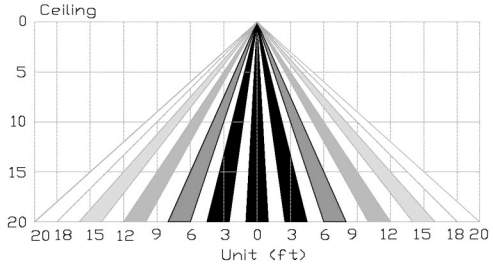
Detection Area

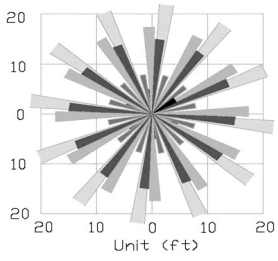
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





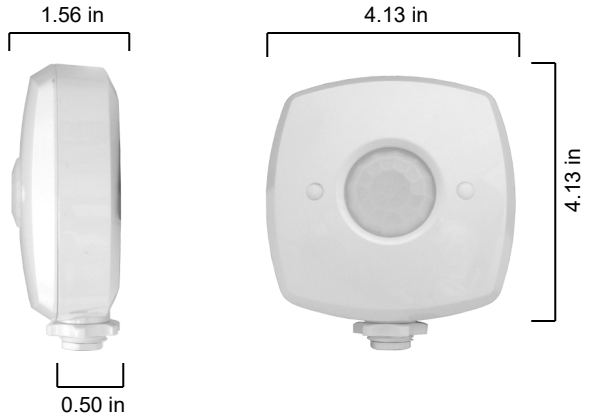
AL1: Center aisle lens cover

AL2: End of aisle lens cover

PSC-HB-I-FM-110DW

Summary	
Sensor Type	Passive infrared (PIR); dual load
Input Voltage	120-277VAC, 50/60Hz
Max Load	800VA @ 120VAC, 6.7A
	1200VA @ 208/240/277VAC, 4.3A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-40° to 60°C
Storage Temperature	-40° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

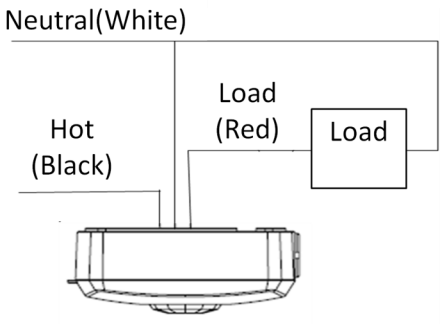
Physical Dimensions



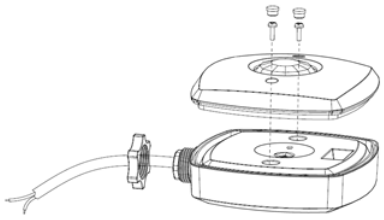
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-110D

Weight: 7.8 oz

Wiring Diagram



Assembly



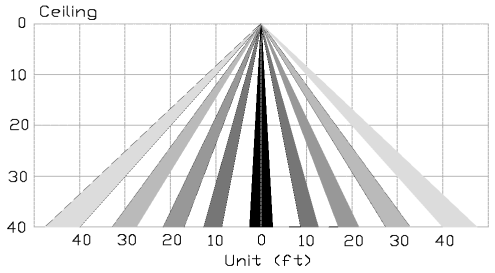
Settings Adjustment

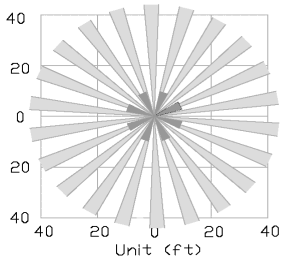
Sensitivity 1 2	Delay Time 3 4 5	Sensor Logic 6 7 8
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	↓ ↓ ↑ Load 1 + Photocell
↑ ↓ 80%	↓ ↑ ↓ 30 sec	↓ ↑ ↓ Load 2 + Photocell
↑ ↑ 70%	↓ ↑ ↑ 1 min	↓ ↑ ↑ Photocell only
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

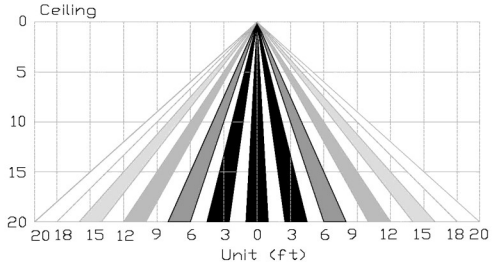
Detection Area

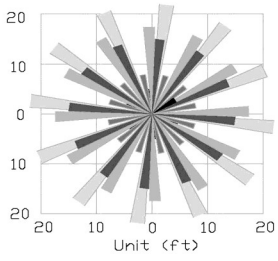
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





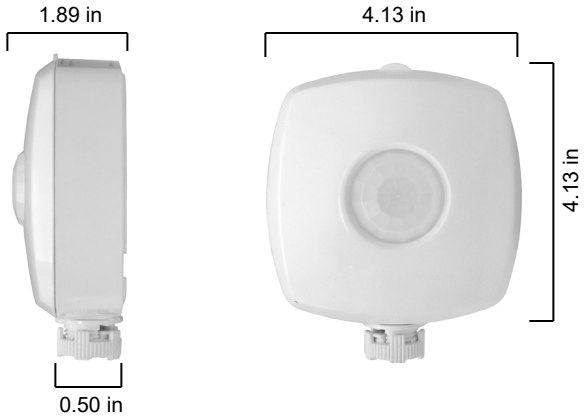
AL1: Center aisle lens cover

AL2: End of aisle lens cover

PSC-HB-I-FM-200

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	347/480VAC, 50/60Hz
Max Load	1500VA @ 347VAC, 4.3A 2000VA @ 480VAC, 4.1A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

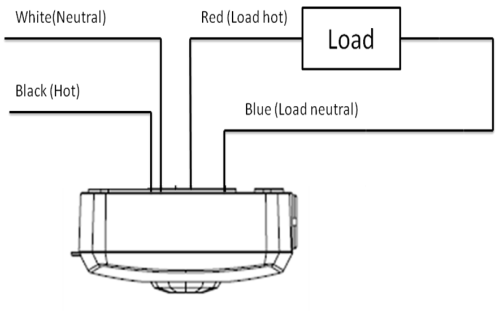
Physical Dimensions



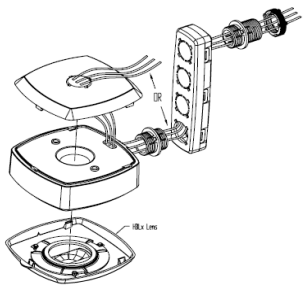
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-200W

Weight: 7.05 oz

Wiring Diagram



Assembly



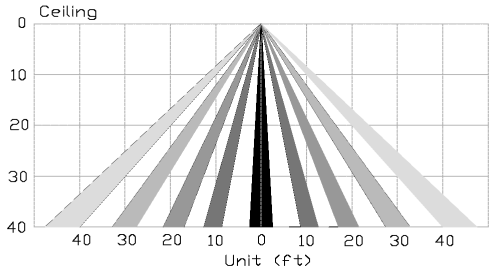
Settings Adjustment

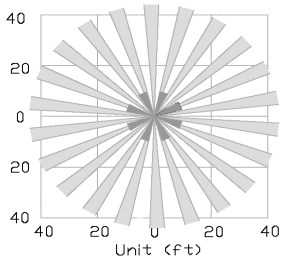
Sensitivity (1 2)	Delay Time (3 4 5)	Sensor Logic (6 7 8)
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	
↑ ↓ 80%	↓ ↑ ↓ 30 sec	
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

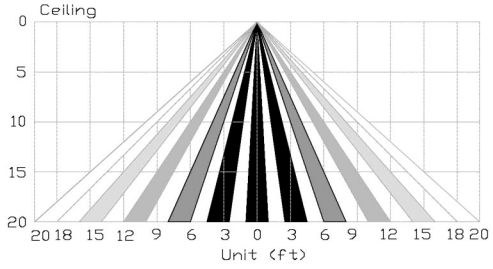
Detection Area

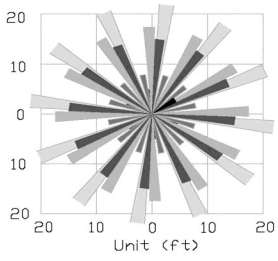
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft





LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





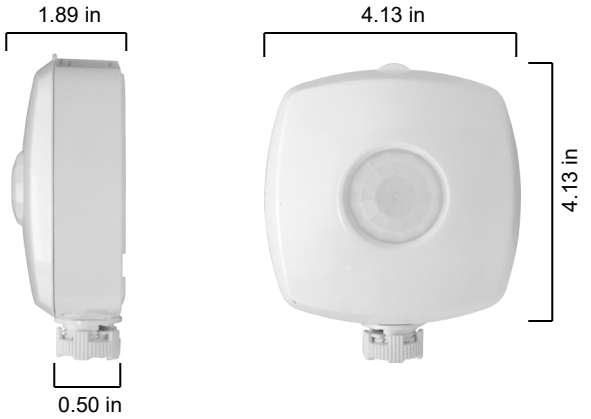
AL1: Center aisle lens cover

AL2: End of aisle lens cover

PSC-HB-I-FM-210

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	347/480VAC, 50/60Hz
Max Load	1500VA @ 347VAC, 4.3A 2000VA @ 480VAC, 4.1A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-20° to 60°C
Storage Temperature	-20° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP20
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

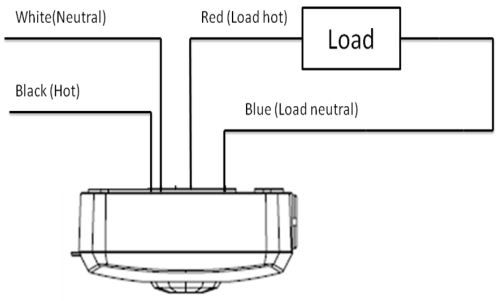
Physical Dimensions



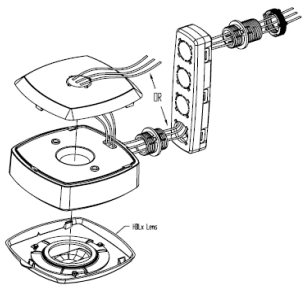
Not suitable for outdoor use
Equivalent outdoor rated version: PSC-HB-I-FM-200W

Weight: 7.05 oz

Wiring Diagram



Assembly



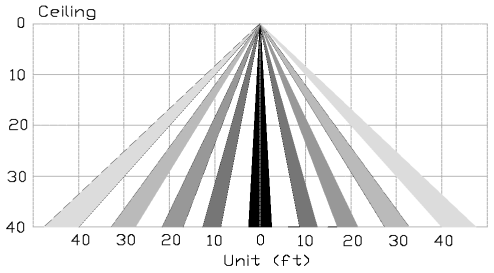
Settings Adjustment

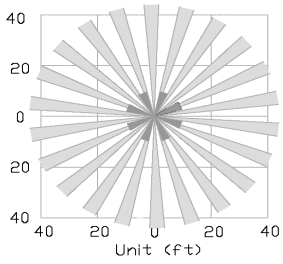
Sensitivity (1 2)	Delay Time (3 4 5)	Sensor Logic (6 7 8)
↓ ↓ 100%	↓ ↓ ↓ 10 sec	↓ ↓ ↓ PIR sensor only
↓ ↑ 90%	↓ ↓ ↑ 20 sec	↓ ↓ ↑ PIR + Photocell
↑ ↓ 80%	↓ ↑ ↓ 30 sec	↓ ↑ ↑ Photocell only
↑ ↑ 70%	↓ ↑ ↑ 1 min	
	↑ ↓ ↓ 2 min	
	↑ ↓ ↑ 5 min	
	↑ ↑ ↓ 10 min	
	↑ ↑ ↑ 20 min	

↓ : OFF
↑ : ON

Detection Area

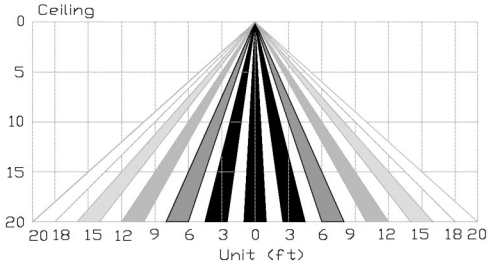
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

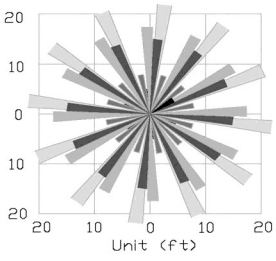




AL1: Center aisle lens cover

LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



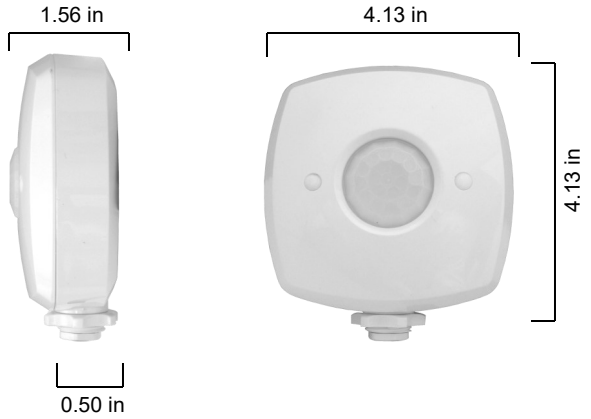


AL2: End of aisle lens cover

PSC-HB-I-FM-200W

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	347/480VAC, 50/60Hz
Max Load	1500VA @ 347VAC, 4.3A 2000VA @ 480VAC, 4.1A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	N/A
Operating Temperature	-40° to 60°C
Storage Temperature	-40° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

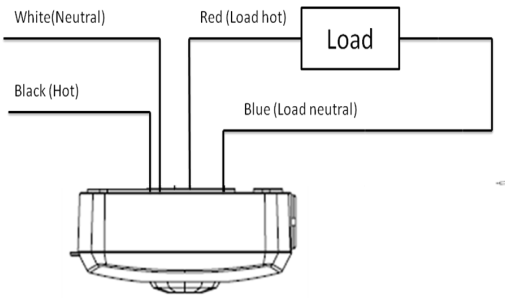
Physical Dimensions



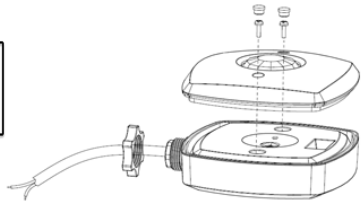
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-200

Weight: 7.8 oz

Wiring Diagram



Assembly



Settings Adjustment

Sensitivity (1 2)

↓ ↓	100%
↓ ↑	90%
↑ ↓	80%
↑ ↑	70%

Delay Time (3 4 5)

↓ ↓ ↓	10 sec
↓ ↓ ↑	20 sec
↓ ↑ ↓	30 sec
↓ ↑ ↑	1 min
↑ ↓ ↓	2 min
↑ ↓ ↑	5 min
↑ ↑ ↓	10 min
↑ ↑ ↑	20 min

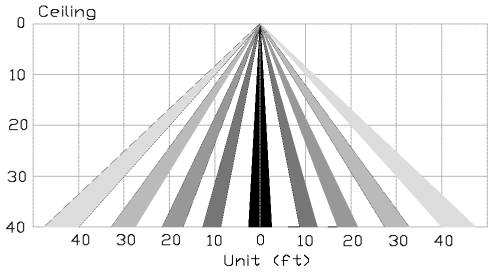
Sensor Logic (6 7 8)

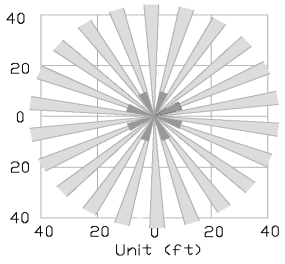
↓ ↓ ↓	PIR sensor only

↓ : OFF
↑ : ON

Detection Area

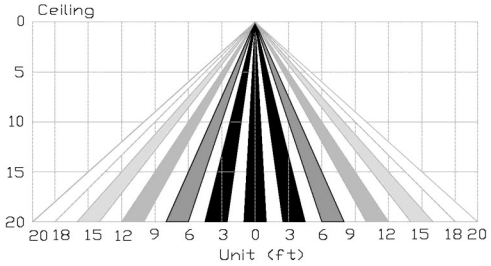
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

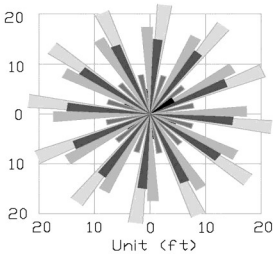




AL1: Center aisle lens cover

LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft



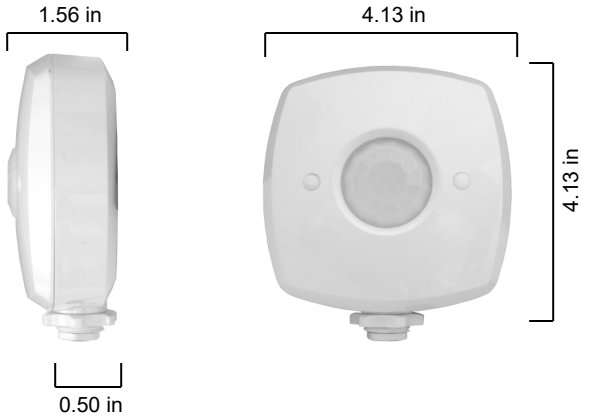


AL2: End of aisle lens cover

PSC-HB-I-FM-210W

Summary	
Sensor Type	Passive infrared (PIR); single load
Input Voltage	347/480VAC, 50/60Hz
Max Load	1500VA @ 347VAC, 4.3A 2000VA @ 480VAC, 4.1A
Min Load	None
Max Range (high bay lens)	Dia. up to 80ft @ 40ft mounting height
Max Range (low bay lens)	Dia. up to 40ft @ 20ft mounting height
Optimal Range (high bay lens)	Dia. 25ft @ 40ft mounting height
Optimal Range (low bay lens)	Dia. 13ft @ 20ft mounting height
Time Delay	10 sec to 20 min
Photocell Sensitivity	ON @ 30lux, OFF @ >100lux
Operating Temperature	-40° to 60°C
Storage Temperature	-40° to 60°C
Relative Humidity	20-90% non-condensing
Mounting	Fixture mount
IP Rating	IP65
Color	White
Warranty	5 years
Certifications	UL/cUL listed E341446

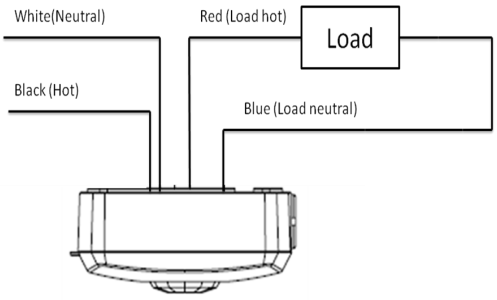
Physical Dimensions



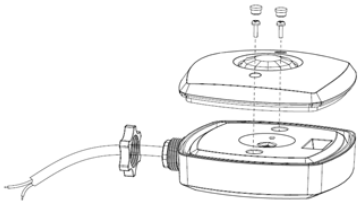
Suitable for outdoor use
Equivalent indoor version: PSC-HB-I-FM-210

Weight: 7.8 oz

Wiring Diagram



Assembly



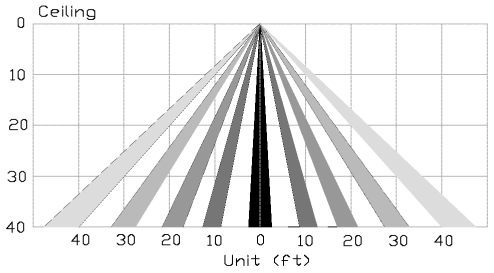
Settings Adjustment

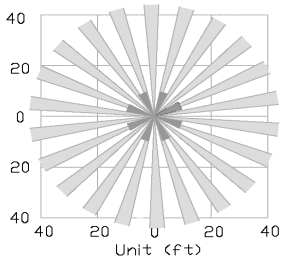
Sensitivity		Delay Time			Sensor Logic		
1	2	3	4	5	6	7	8
↓	↓	100%	↓	↓	↓	10 sec	↓	↓	↓	PIR sensor only
↓	↑	90%	↓	↓	↑	20 sec	↓	↓	↑	PIR + Photocell
↑	↓	80%	↓	↑	↓	30 sec	↓	↑	↑	Photocell only
↑	↑	70%	↓	↑	↑	1 min				
			↑	↓	↓	2 min				
			↑	↓	↑	5 min				
			↑	↑	↓	10 min				
			↑	↑	↑	20 min				

↓ : OFF
↑ : ON

Detection Area

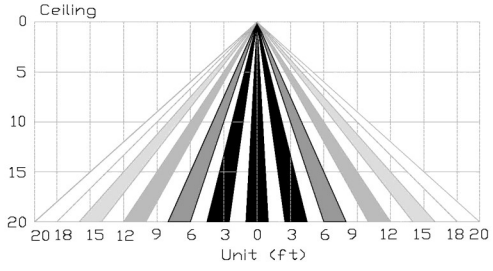
HBL: High bay lens Max: Dia. 80ft Optimal: Dia. 25ft

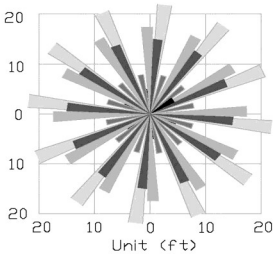




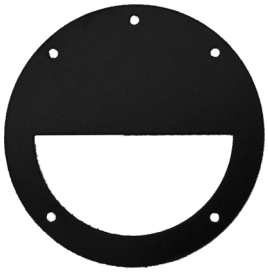
AL1: Center aisle lens cover

LBL: Low bay lens Max: Dia. 40ft Optimal: Dia. 13ft





AL2: End of aisle lens cover



PSC-HB Packaging & Accessories

Distribution Kit

Indoor Sensor Kit: Each master carton contains 12 sensor kits and measures approx. 11”L x 10”W x 10.5”H. Unit cartons measure approx. 5.5”L x 4.5”W x 3.25”H. Each kit contains:

- 1 High bay sensor
- 1 Installation guide
- 1 ARM: Mounting arm*
- 1 Back cover**
- 2 snap-on chase nipples***
- 2 mounting screws & anchors
- 1 HBL: High bay lens†
- 1 LBL: Low bay lens
- 1 AL1: End of aisle lens cover (180°)
- 1 AL2: Center of aisle lens cover

Outdoor Sensor Kit: Each master carton contains 12 sensor kits and measures approx. 11”L x 10”W x 10.5”H. Unit cartons measure approx. 5.5”L x 4.5”W x 2.5”H. Each kit contains:

- 1 High bay sensor
- 1 Installation guide
- 2 snap-on chase nipples***
- 2 mounting screws & anchors
- 1 HBL: High bay lens†
- 1 LBL: Low bay lens
- 1 AL1: End of aisle lens cover (180°)
- 1 AL2: Center of aisle lens cover

Notes

How to order: To order sensors in distribution kits add the following suffixes to the model number:

- “/A” = include mounting arm (indoor sensors only)
- “/C” = include back cover (indoor sensors only)
- “/K” = distribution kit packaging

Examples:

PSC-HB-I-FM-110D/A/C/K = High bay PIR sensor, 120-277VAC input, with integrated photocell, dual relay, mounting arm, back cover, in distribution kit packaging.

PSC-HB-I-FM-100W/A/K = High bay PIR sensor, 120-277VAC input, no photocell, single relay, mounting arm, in distribution kit packaging.

* The mounting arm is not IP65 rated for outdoor use. Currently, distribution kits for outdoor sensors (i.e., those that have a “W” in the model number) do NOT include the mounting arm as this would negate the IP65 rating. An IP65 rated mounting arm is on our development roadmap.

** The back cover is an optional accessory for indoor rated sensors. It merely provides a method for mounting the sensor to a J-box or fixture housing via a 1/2” knockout at the top center rather than on the side. The back cover is not required and cannot be installed on the outdoor sensors (i.e., any sensor with a “W” in the model number).

*** The sensor comes with two types of snap-on chase nipples, one that is short for connecting plastic to plastic (e.g., connecting the sensor unit to the mounting arm), and one that is longer for connecting plastic to metal (e.g., connecting the mounting arm to the side of the light fixture). The shorter snap-on chase nipple is pre-installed in the sensor. The mounting arm and chase nipple can be taken apart by using a slotted screwdriver.

† The high bay lens (HBL) is factory pre-installed without lens covers by default.

Bulk Pack

Indoor Sensor Bulk Pack: Each master carton contains 36 sensors bundled together and separated by cardboard partitions. Master carton measures approx. 17.5”L x 15.5”W x 10.5”H. Mounting arms, back covers, and extra snap-on chase nipples packaged separately. Bulk pack contains:

- 36 High bay sensors
- 36 Installation guides (bundled together)
- 36 snap-on chase nipples (pre-installed)
- 72 mounting screws & anchors
- 36 HBL: High bay lens (pre-installed)
- 36 LBL: Low bay lens
- 36 AL1: End of aisle lens cover (180°)
- 36 AL2: Center of aisle lens cover

Outdoor Sensor Bulk Pack: Each master carton contains 32 sensors bundled together and separated by cardboard partitions. Master carton measures approx. 17.5”L x 15.5”W x 10.5”H. Mounting arms, back covers, and extra snap-on chase nipples packaged separately. Bulk pack contains:

- 32 High bay sensors
- 32 Installation guides (bundled together)
- 32 snap-on chase nipples (pre-installed)
- 64 mounting screws & anchors
- 32 HBL: High bay lens (pre-installed)
- 32 LBL: Low bay lens
- 32 AL1: End of aisle lens cover (180°)
- 32 AL2: Center of aisle lens cover

Mounting Arm Bulk Pack: Each master carton contains 330 mounting arms and measures approx. 19”L x 16”W x 10.5”H. Each inner carton contains 10 mounting arms (does not include chase nipples) and measures approx. 5.25”L x 4.5”W x 3.25”H.

Other accessory Bulk Pack: packaging varies for snap-on chase nipples, back covers, and other accessories and spare parts.

Notes

How to order: To order sensors in bulk packs add the following suffixes to the model number: Do NOT add the suffix “/K”.

- “/A” = include mounting arm (indoor sensors only)
- “/C” = include back cover (indoor sensors only)
- “/F” = bulk pack

Examples:

PSC-HB-I-FM-110D/A/C/F = High bay PIR sensor, 120-277VAC input, with integrated photocell, dual relay, mounting arm, back cover, in bulk packaging.

PSC-HB-I-FM-100W/F = High bay PIR sensor, 120-277VAC input, no photocell, single relay, no mounting arm, in bulk packaging.

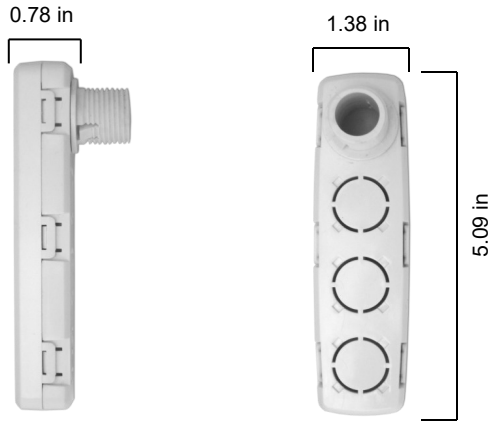
ARM: Mounting Arm (optional)

The PSC-HB series of high bay sensors are designed to mount onto the side of lighting fixtures via 1/2” knockout. In many applications the mounting arm is unnecessary.

However, some fixtures place the knockout too far from the bottom edge of the housing to mount the sensor directly. In this case, the metal of the fixture housing may block the sensor or the heat from the fixture may create interference that limits the PIR sensor’s operational reliability.

The mounting arm simply moves the sensor unit below the bottom edge of a fixture to ensure it has a clear line of sight.

The mounting arm not IP65 rated for outdoor use, it is intended only for indoor applications. Using this accessory with an IP65 rated PIR sensor will negate the IP65 rating and void the warranty.



BC: Back Cover (optional)

The back cover is an optional accessory for indoor rated sensors. It merely provides a method for mounting the sensor to a J-box or fixture housing via a 1/2” knockout at the top center rather than on the side.

All indoor sensors are rated IP20 with or without the back cover installed.

The back cover cannot be installed on the outdoor sensors (i.e., any sensor with a “W” in the model number).

LBL & HBL (Low Bay & High Bay Lens)

The high bay lens used in the PSC-HB series is the Fresnel ceiling mount array CM 0.77 GI V5. The low bay lens is the Fresnel ceiling mount array CM 0.77 GI V3.

For convenience, a hyperlink to complete specifications on Fresnel Technologies, Inc.’s website is included below. However, mwConnect cannot make any guarantees regarding the information contained therein. Please contact Fresnel Technologies, Inc. directly if you have any questions about their products.

http://www.fresneltech.com/pdf/CM0.77GIVX.pdf

Low bay lens see pages 7-8
High bay lens see pages 11-13